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Keynes, Inflation, and the Public Debt: *"How to Pay for the War"* as a Policy Prescription for Financial Repression?

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April 2020

Abstract

This paper discusses whether John Maynard Keynes' "How to Pay for the War" provided prescriptions for the policies of "financial repression" that were implemented in England, and other countries, following World War II. It focuses on contemporary understandings of inflation which has been identified as a key factor for driving down public debt levels. Keynes has been widely acknowledged as influential in the management of public debt, and "How to Pay for the War" has been cited as proof for a widely held belief in "money illusion", suggesting the possibility of using inflation for driving down real interest rates of public bonds. It seems reasonable to suppose that Keynes' writings were instrumental in translating English monetary experiences of the 1920s and 1930s into expectations of policy makers during and after the Second World War, and thus provide an important explanation for the why and when of "financial repression". The paper argues that Keynes provided only partly ammunition for a policy of "financial repression", and none for using inflation as a "tax gatherer" to the detriment of domestic savers in general. Crediting him as a source for widespread "money illusion" is also out of line with the historical record.

JEL classification: B20, E31, H63, N24, N44

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Introduction

In the wake of increasing public debt levels, the literature on "financial repression" has seen a comeback. Understood broadly as a combination of artificially set interest ceilings, capital controls, and inflation, "financial repression" describes a set of policy tools in favor of public finances but detrimental to domestic savers and bondholders (Roubini and Sala-i-Martin 1995). The timing and economic effects of such measures have been demonstrated in detail (Battilossi 2005; Reinhart 2012). Less attention has been paid to explaining the historical sources of "financial repression". Thus, there remains a puzzle as to why public officials pursued policies of "financial repression" when they did. In the case of England, high public debt levels had posed a problem in the wake of the First World War. Yet policies of "financial repression" would not be pursued until after the Second World War.

John Maynard Keynes' "How to Pay for the War", published in 1940, figures prominently in explanations of "financial repression" (Keynes 1940a). Written during the early stages of World War II the pamphlet seems to have foreshadowed and legitimized the expropriation of savers and bondholders by the state. "Financial repression" greatly helped to reduce the burden of debt after the Second World War which had persisted after the first one (Crafts 2016). Why was the state successful after the Second World War where it had failed before? According to the economic literature, "How to Pay for the War" provided guidance for policymakers on two fronts. First, as Reinhart and Sbrancia (2015) have claimed, it illuminated the functioning of an "inflation tax" by discussing the relations between state budgets and monetary depreciation. Second, as Akerlof and Shiller (2010) have argued, "How to Pay for the War" fortified the academic claim for a widespread belief in "money illusion" (Akerlof and Shiller 2010). More recently, "How to Pay for the War" has been explicitly proposed as a guidance for financial policy in the face of increasing debt levels (Sanz Bas 2019).

While inflation is not included in all definitions of "financial repression" it has been generally considered as instrumental for driving down real interest rates, as the de-valuation of money also devalued the nominal debt held by bondholders. To do so, however, the public needed to be unaware of the inflationary effects on bond yields. Otherwise, investors would be expected to protect themselves against the losses by indexing bonds, or to withdraw from the market altogether (Dornbusch and Draghi 1990). The failure to do so is considered by Akerlof and Shiller as proof for the existence of "money illusion", and "How to Pay for the War" is one of their central reference points for making this claim.[1]

This article tests the historical validity of such claims in light of the historical record, and by doing so addresses the question of the prerequisites of "financial repression" in the 1940s and 1950s more generally. Taking Keynes' campaign on "How to Pay for the War" and the debate surrounding it as a starting point, it investigates contemporary understandings of monetary values and its role for controlling public debt levels. Keynes has been widely acknowledged as "influential" in the management of public debt (Allen 2019, p. 44), and it seems reasonable to suppose that his writings were instrumental in translating English monetary experiences of the 1920s and 1930s into expectations of policy makers during and after the Second World War.

The article attempts to position Keynes' thoughts in the institutional setting of financial policy during and after the Second World War (Weir 1989) to see whether this assumption holds true. Indeed, the control of real interest rates and the instrumentalization of inflation figure prominently in "How to Pay for the War". A closer look will reveal, however, that Keynes provided only partly ammunition for a policy of "financial repression", and none for using inflation as a "tax gatherer" to the detriment of domestic savers in general. Crediting him as a source for widespread "money illusion" is also out of line with the historical record. Finally, the evidence suggests that speaking of an "era of financial repression" is misleading. The low real interest rates that Keynes argued for were a direct outcome of learning from experience about post-war-worlds and the burden of public debt. There is little to no evidence from this period that Keynes, the Treasury, or the Bank of England had an interest in using inflation as a "mighty tax gatherer" over the long run.

The paper proceeds as follows: the first part puts "How to Pay for the War" in the long-term context of English debt management and its interpretation in the economic history literature. The second part provides an analysis of Keynes' "How to Pay for the War", supplemented with additional publications. It starts with a short description of its contents, then focuses on what Keynes thought about inflation awareness in general, and about its role for the

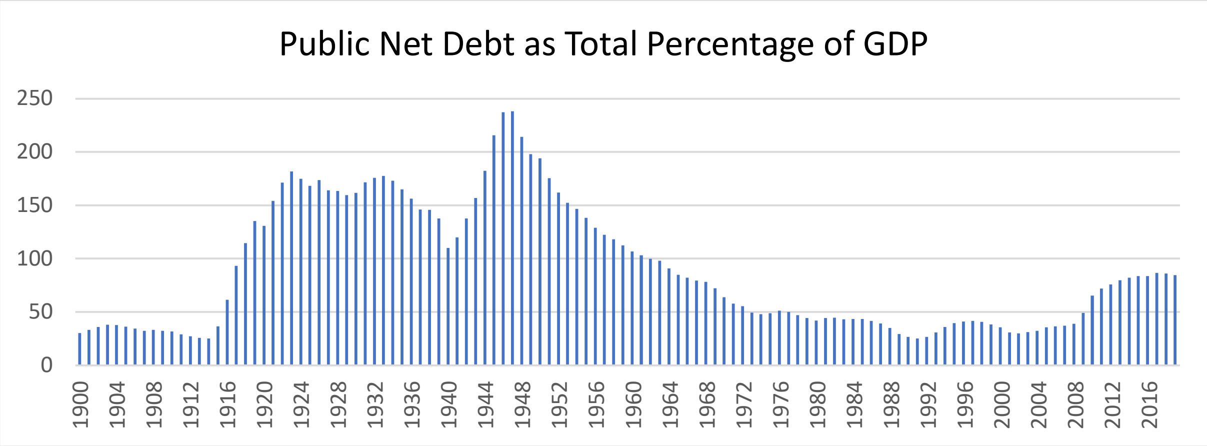
[1] "Money illusion" is usually not discussed as a prerequisite for "financial repression" because of its doubtful validity as a concept in economics (Chytilova 2017). Yet a widespread unawareness of monetary depreciation would have greatly facilitated public borrowing at negative real interest rates, and the sluggishness of inflation expectations in practice has been generally accepted (Bassetto and Galli 2019).

management of public debt in particular. The third part provides an outlook on Keynes' role for public finances and inflation during and after the Second World War. The final part concludes.

From Fiscal Orthodoxy to "Financial Repression". Public Debt and Inflation Awareness in English Economic History

The development of English sovereign debt in the first half of the 20th century looks like a stairway. It starts from a negligible ratio of debt-to-GDP in the early 20th century and rises steeply during the First World War. It stabilizes at a high level during the 1920s and declines somewhat in the 1930s before making another upward swing during the Second World War. In the second half of the 20th century, the development of English sovereign debt resembles a slide. Shortly after the Second World War, the ratio continues to drop: steeply and continuously until well into the 1990s. The two wars had the same effect on public finances. Their aftermaths were astonishingly different. How did governments and Treasury succeed after World War II in what they had failed to achieve two decades earlier?

Figure 1[2]



From a superficial perspective, the answer seems easy. In both World Wars long-term domestic borrowing was "the most significant factor" (Broadberry and Howlett 2016, p. 204; End et al. 2019). However, after the First World War, real interest rates on long-term bonds

[2] www.ukpublicspending.co.uk

were high, mostly due to the deflationary policies of the time. This put downward pressure on prices and wages, also lowering tax incomes and jeopardizing the ability of the state to reduce public debt. In the late 1920s real Consol yields, i.e. yields of a perpetual bond for which the government had the option of redemption, were three percent higher than before World War I (Foreman-Peck 2002, p. 106). Whereas countries like Germany or France had been able to get rid of their internal indebtedness by "cheating" the debt holders through inflation (ibid., p. 115) bondholders in England succeeded in receiving high yields despite widespread unemployment and antagonisms towards the "rentier" (Howson 1975; Maier 1984). Although there was a widely held belief "that owners of government bonds should not profit from WWI and that future generations should not have to pay for WWI" (Nason et al. 2007, p. 290), even continuous budget surpluses proved unable to reduce the debt significantly.

After the Second World War, the situation was different. Real interest rates turned negative, due to inflation in a context of blocked investment alternatives and interest ceilings. Because there seems to have been a conscious government policy of expropriating rentiers – the holders of government debt – the term "financial repression" was introduced. Originating from debates around financial development strategies in the 1970s, the concept more recently has been used to analyze fiscal and monetary policies of industrialized countries in the decades following the Second World War, including the case of England (Battilossi 2005; Monnet et al. 2014; Reinhart and Sbrancia 2015; van Riet 2018; Marinkov 2019). "Financial repression" can be defined as involving "directed lending to the government by captive domestic audiences (such as pension funds or domestic banks), explicit or implicit caps on interest rates, regulation of cross-border capital movements, and (generally) a tighter connection between government and banks" (Reinhart 2012, p. 38). As a means for reducing debt-to-GDP ratios "financial repression" would usually be accompanied by "an equally steady dosage of inflation" (ibid: 39; Roubini and Sala-i-Martin 1995). Because such policies were widespread between the 1940s and 1970s the whole period has been considered an "era" of "financial repression" (Reinhart 2012; Reinhart and Sbrancia 2015).

Recently, Nick Crafts has identified inflation as the driver of debt reduction after the Second World War in England (Crafts 2016). Already by the late 1950s the ratio of national debt-to-GDP was lower than at the end of the First World War. Against this background, Charles Maier´s claim that there was a "general understanding" after World War II to "not burden the polity with the social and psychological toll of acute inflation" (Maier 1984, p. 121) makes sense in comparison to the German inflation after World War I, but not in light of

Britain´s own history when viewed through the lens of "financial repression". Yet Maier´s claim is well supported by abundant historical literature on English public finance after the Second World War. The management of debt, its institutional and organizational developments, the structure and level of indebtedness, the "Treasury view" on state finances, the "origins of cheap money" and the role of the Bank of England are all well documented (Sayers 1956; Fforde 1992; Howson 1993; Wormell 2002; Allen 2012 and 2019). If anything, inflation figures as a "threat" in those accounts, but not as a conscious policy choice (Howson 1993, p. 2). How can this be explained?

Few have attempted to explain and understand the differences between the aftermaths of the two World Wars in light of "financial repression" and inflationary monetary policies intended to reduce the debt burden. Fforde (1992) focuses on Keynes' role mostly with respect to Anglo-American loan negotiations, and does not discuss inflation as a policy prescription or "tax gatherer". Allen´s study on the role of the bank of England as a manager of public debt provides valuable insights in the decision-making process relevant for putting "financial repression" into practice (Allen 2019). But his detailed study does not discuss the role of "How to Pay for the War", nor does it raise the issue of public inflation awareness that was crucial for investors given the very-long-term durations of British Consols and other government bonds.

Clearly, something changed between the 1920s and the 1950s in terms of fiscal as well as monetary policy. Yet much of economic history treats the development as given focusing on the economic effects of public debt levels rather than explaining how they came into existence. One can, of course, draw some inference from explanations resting on the period of "financial repression" alone. If authorities were willing and able to use inflation and interest ceilings as a means to bring down the public debt after the Second World War they must have been either unwilling or unable to do so after the First World War. Reinhart and Sbrancia claim that "the role played by the combination of some inflation and negative ex-post real interest rates in debt reduction was well understood ex-ante" by policy makers. As an example, they use Keynes' "How to Pay for the War" as being "filled with discussion of inflation 'as a mighty tax gatherer'" (Reinhart and Sbrancia 2015, p. 300). Reinhart and Sbrancia acknowledge that Keynes was skeptical towards inflation. They fail to mention, however, that using inflation for taxation was not a novel insight at the time and widely discussed by Keynes as well as inside the Treasury (Keynes 1919; 1923). Already John Stuart Mill in the 1870s had argued that governments always had "a direct interest in lowering the value of the currency, because it is the medium in which their own debts are computed." (Mill 1871, p. 558; cf. Laidler 1991: p. 34).

By this criterion, the strategy could just as well have been used after the First World War. It is clear that somehow, as Reinhart claims, the Great Depression and World War II were instrumental in changing government policies away from the idea of laissez-faire (Reinhart 2012, p. 40). Yet a more detailed historical account of "How to Pay for the War" might be able to identify more clearly where such ideas were coming from, and whether inflation itself was actually considered as a policy tool by Keynes. Had Keynes' writings – as implicitly claimed by the more recent literature on "financial repression" – the potential of changing the preferences and expectations of policy makers in such directions?

The need for a historical explanation is informed by economic theory. High levels of debt pose a risk to credibility, and at a certain level – as Dornbusch and Draghi (1990, p. 6) state - creditors "shy away" from bonds and ask for measures like indexing. If that had happened after World War II in the UK - and other countries - debt reduction would hardly have been effective. Why indexing was seemingly not an option remains puzzling unless the institutional constraints are seen as so powerful as to leave investors with no other choice. In "Animal Spirits", however, the failure of indexing bonds is seen as an indication of the failure to see through the "veil of inflation" (Akerlof and Shiller 2010, p. 50), a failure that had been supposedly pronounced and widespread at the height of "financial repression" before the 1960s. As evidence, Akerlof and Shiller cite "How to Pay for the War" (ibid). The lack of financial literacy implied here could provide an important prerequisite as to why "financial repression" was deemed a successful strategy by policymakers and finance officers in favor of expropriating domestic savers, in particular the holders of public debt.

The importance of Keynes in advising the Treasury on a permanently low nominal interest rate for public debt during the war has been widely documented and acknowledged (Howson 1993; Aspromourgos 2014). His views on using inflation as a policy tool for managing public debt have received much less attention. While inflation was clearly a consequence of war financing, and crucial for reducing the debt burden, its role for contemporary policy choices remains dubious. By the end of the Second World War numerous countries across the world had become so highly indebted that public debt was considered a "political problem of the first order" (Wallich 1946, p. 293). Many contemporary commentators already suspected the return of inflationary forces. In retrospect, some authors (Fry 1989) have explicitly linked "financial repression" to the Keynesian revolution, and inflationary expansion as a policy tool. More recently, however, Allen has critically stated that "no reader of the archives can seriously believe that the Treasury or the Bank of England actually wanted to create unanticipated inflation" (Allen 2014, p. 212). Earlier historical accounts on financial policy and contemporary economic thinking have similarly argued that inflation was generally not "expected to be a permanent problem" (Howson 1993, p. 44). A closer look at "How to Pay for the War" can thus provide important insights into the origins of "financial repression" and to what extent Keynes should indeed be seen as instrumental for it.

Keynes' "How to Pay for the War"

In 1939 Keynes was heavily engaged in a political campaign that his biographer Donald Moggridge has called "the most sophisticated and successful of his many campaigns as a publicist" (Moggridge 1992, p. 629). His aim was to solicit widespread support for a war financing scheme as Britain was starting to mobilize for what would ultimately become the Second World War. Keynes was realistic about the costs of mobilization as well as its effects. He hoped to avoid rigid controls as much as inflation. At the center of his plan was the idea of compulsory savings, or deferred payments. Stated simply, Keynes asked labor to forgo parts of its income gains in favor of state consumption. It was basically a "forced loan" – money which the English state was supposed to pay back once the war was over. Keynes spread his ideas via lectures, The Times, The Economic Journal, private and public discussions, radio, and a pamphlet entitled "How to Pay for the War", published in 1940. Although small in comparison to scholarly debates on his other works, Keynes' plan "How to Pay for the War" has still elicited some historical research interest beyond its role for "financial repression" (Trevithick 1975; Littleboy 1996; King 1998), most notably for its importance in the development of modern macro-economics and national accounting (Kurabayashi 1994; Hicks 1990).

In devising and propagating his plan, Keynes' primary concern was the question of distribution which he called the "thorniest question of all" (Keynes 1940a, p. 2). In contrast to normal times, Keynes explained, consumer goods in a war economy would not become more plentiful when production and working time were extended because any additional output would have to be used for the war effort (ibid, p. 3). Thus, there were fewer consumption opportunities available to the public. At the same time the increased demand for labor and longer working hours would put more money into the hands of the working people. Less certain was how the scarcity produced by the war economy would translate into the price system. If nothing was done, Keynes argued, a rise in prices was inevitable because of the disequilibrium between supply and demand. This would lead to much or all of the wage gains being sucked up by inflation. The money would then go to the "profiteers", the firms who sold the expensive products. It would then go partly to the Treasury in the form of (excess profit) taxes and partly remain in the hands of the profiteer who would use it to buy public bonds. Keynes argued that this had happened in World War I. Inflation had proved to be "much more cruel in equity terms than the most cruel of regressive taxes" (Maital 1972, 159).

Something needed to be done. Keynes had been preoccupied with the issue of prices and inflation from the beginning of the war as "one of the most urgent and important matters for the Home Cabinet" (Keynes 1939b, p. 4). Price controls could help in keeping labor from making wage demands. Keynes was in favor of this. But from the beginning, he was skeptical whether it was sufficient. In September 1939 he called the idea of trying to keep prices at pre-war levels "fanciful and highly unrealistic" (Keynes 1939c, p. 31). "How to Pay for the War" presented a comprehensive plan centering on the idea of "deferred payments". Roughly speaking all receivers of income were supposed to forego part of their wage gains in exchange for a claim on future resources. The contribution was supposed to move on a progressive scale. Lower incomes were exempted. The final publication also included a detailed plan on family allowances.

The deferred payments, which would be placed with a range of institutions like the Post Office Savings Bank, friendly societies or trade unions, were to be released in the first post-war slump when demand was behind supply (Keynes 1940a, p. 44-50). The technicalities of repayment were essentially dictated by the state. The interest rate was set by Keynes at 2,5 per cent – the same rate which he envisioned for public bonds. In a letter to the editor of the Times Keynes argued that "in principle these loans would be in exactly the same position as the rest of the short-dated debt which the war will leave behind it" (Keynes 1939d, p. 82).

Keynes himself stated that most economists and large parts of the public reacted favorably to his plan. Parts of labor was noncommittal or even hostile (Toye 1999) as was the National Savings Association who feared a crowding-out effect. While part of the critique centered on the problem of voluntarism another part addressed the problem of inflation. When Keynes presented his plan to union members, he received skeptical reactions because they suggested "that the value of the deferred pay was likely to be eradicated by future inflation" (Toye 1999, 17). Barbara Wootton, a lecturer in Economics at Cambridge and Research Officer of the Trade Union Congress, praised Keynes' proposal for a capital levy in a lengthy review, arguing that this might "diminish the very real danger that if our deferred pay ever is paid up, this will be done by inflation" (Wootton 1940, p. 149).

Keynes suggested that there should be some sort of indexing but he also admitted that given historical experience it would be "'extraordinarily difficult to get an assurance' from the Treasury on these lines" (Toye 1999, p. 17). The skepticism proved valid. When the Treasury ultimately issued a bond similar to what Keynes had envisioned its value was eradicated by post-war inflation (ibid.). It seems ironic, therefore, that given inflation as a running thread throughout his work Keynes seemed unwilling to discuss it as a serious element of the plan for future repayments. He seemingly had no problem to follow the suggestion of Henry Clay and others to drop a section on indexing compulsory savings because "it would divert discussion from his main proposal" (Moggridge 1992, p. 629).

How to Pay for the War and the Prerequisites of "Nature´s Remedy"

Early in the war, Keynes had admitted the advantage of a rising price level for public finances: "The aspect of higher prices as an instrument of revenue is not to be overlooked. Direct taxation can scarcely do all that is wanted" (Keynes 1939b, p. 6). Given inflation to always fall back on, financing of the war itself was not of primary interest to Keynes. The goods that were ordered by the supply departments would be "financed anyway". The importance of devising a coherent plan of war finance was social, "to prevent the social evils of inflation now and later" (Moggridge 1992, p. 643). In Keynes' view, however, inflation was less a conscious policy but rather the result of laissez-faire. At different points he described it as "nature´s remedy", and in a much-quoted passage he explained the problem of assigning responsibility for it as the main "advantage":

> *"No one has to take the responsibility for inflation, not even the Chancellor of the Exchequer. The adoption of my plan would require the approval of the Labour Party. But they will never be asked to approve inflation. It will just happen. It is nature's remedy, ebbing up like the tides, silently and imperceptibly and irresistibly (...) It greatly benefits some important interests. It oils the wheels everywhere, and a regime of rising wages and profits spreads an illusion of prosperity. So if one is to bet on the field, inflation must always be the favourite"* (Keynes 1939e, p. 77).

The term "nature´s remedy" implied a lack of agency on the part of labor. "The workingmen", Keynes claimed, had "no (…) choice" (Keynes 1939e, p. 76). Inflation would "defeat" him just like in the last war so that the real gains would be diminished without any possibility of resistance. Wage demands would simply drive a "vicious spiral" that could potentially lead to an "unlimited inflation" (ibid.). The reason why Keynes believed that inflation had not run out of control lay in temporality: "Wage adjustments and the like take time (…) It is these time-lags and other impediments which come to the rescue" (Keynes 1940a, p. 66). In the First World War there had been a "time-lag of almost exactly a year" (Keynes 1940a, p. 72). It was the time-lag which according to Keynes had prevented "disaster" in England, referring to the hyperinflation experiences of countries like Germany and Austria and the more violent protests elsewhere.

Keynes openly criticized union leaders for their futile wage demands: "Like the dog in the fable, they lose the substance in gaping at the shadow" (Keynes 1940a, p. 6). It would be incorrect to ascribe this to individual folly. Keynes admitted "that the better organized sections might benefit at the expense of other consumers" (ibid.). He was sure that "in their minds and hearts the leaders of the trade unions" were aware about this futility "as well as anyone else" (ibid.). He even thought this "legitimate" as long as no alternative plan was presented. It is thus crucial to see Keynes' views on wage demands in a social context. His proposal was an attempt to change the rules of the game. This of course presented a blow to orthodox views of non-interference. When Keynes discussed his plan with Pethick-Lawrence of the Labour Front Bench who vehemently defended voluntary saving, Keynes felt he "was up against such a terrific degree of nineteenth-century laissez-faire, that the discussion was more of historical than of current interest" (Keynes 1940b, p. 98).

An evolutionary view of "inflation awareness"

Keynes accredited union leaders a ready awareness of the consequences of inflation. It is less clear to what extent this held generally. At the time of the publication of "How to Pay for the War" Keynes claimed that inflation was "not yet understood by everyone" and that even economists had "only got clear about it (…) in the last quarter of a century" (Keynes 1940a, p. 70). Yet Keynes' understanding of inflation awareness seems itself hardly consistent. In a letter to the Editor of the New Statesmen, not long after having published "How to Pay for the War", Keynes claimed that everyone had become "index-number conscious" (Keynes 1940b, p. 120-121). John Hicks, who debated Keynes' ideas on "How to Pay for the War" publicly and privately, had early on expressed his irritation of Keynes' readiness to think that – while highly problematic in terms of distributive justice - inflation would at least be able to solve the problem of war financing. Hicks could not see how organized labor would be content with a fall in the standard of living induced by inflation rates outstripping nominal wage gains: "Surely you will agree that that must mainly defeat the aim of the price rise. It seems to me that it will defeat it more quickly than in the last war" (Hicks 1939, p. 33).

More than anything else, the seemingly contradictory statements reveal Keynes' insight into the constantly changing nature of inflation and public awareness. The insight had been evolving over the last two or three decades. During the First World War Keynes had been in the Treasury. Yet despite considerable price increases he claimed he had "never at that time heard our financial problem discussed along these lines" (Keynes 1940a, p. 70). In his "Tract on Monetary Reform" Keynes described the public as "generally (…) very slow to grasp the situation and embrace the remedy" (Keynes 1923, p. 40) when governments attempted to tax away their wealth through inflation. Initially they might even hoard money in the belief that prices will soon come down again. Yet already in the early 1920s, Keynes thought that there was a temporal limit to this. As soon as discovery set in, the public would begin to change its habits, either by turning to durable objects, by reducing the amount of money they kept, or by employing foreign money (Keynes 1923, p. 41). At this point Keynes described the continuous use of depreciated money by the public not so much as a problem of awareness but as a problem of convenience, and a lack of alternatives:

> *"Like other conveniences of life the use of money is taxable, and, although for various reasons this particular form of taxation is highly inexpedient, a government can get resources by a continuous practice of inflation, even when this is foreseen by the public generally, unless the sums they seek to raise in this way are very grossly excessive" (Keynes 1923, p. 43).*

In the Times articles of November 1939 Keynes seems to have followed Hicks' impression of an increased awareness since World War I, and its institutional implications. Calling to mind the necessity of a time-lag between price increases and wage demands, Keynes now argued that "there are today many wage rates linked by agreement with the cost of living, so that the two move together" (Keynes 1939a, p. 43). Keynes also stressed the same problem of an increasing inflation-awareness in a reply letter to a Mr. H. Barrow. Mr. Barrow, who himself favored inflation, had accused Keynes of being a deflationist. It was, Keynes stated, "perhaps, a comfort" that inflation was "always there (…) to fall back on". Yet given the necessary time-lag he also doubted whether "in modern conditions" this time-lag would be "long enough to do the trick". As everyone had become "index-number conscious" the result would be that wages would pursue prices "with not so lame a foot". Summing up his reply, Keynes stated: "And this new fact means that the old-type laissez-faire inflation is no longer to be relied upon." (Keynes 1940c, p. 120-121).

Yet laborers had not been the only ones becoming more conscious. Already in an article one year earlier, Keynes had expressed his hope for lower inflation rates due to a heightened awareness on the part of public officials as well: "We have adopted price controls at the outset and are more conscious of the problem" (Keynes 1939e, p. 78). While the problem-consciousness that Keynes was addressing here referred to the authorities in charge of economic policy, Keynes also assumed a deeper transformation of inflation awareness affecting the whole of society. Yet Keynes' assessment about the current state of inflation awareness remained necessarily speculative because it was understood to be an empirical fact based on historical experiences rather than a timeless quality of rational economic actors. Nowhere does Keynes imply, however, a prevalence of widespread "money illusion" in times of inflation.

Inflation and the National Debt

Given the preoccupation of "How to Pay for the War" with the distribution of debt rather than with inflation per se, it is puzzling that the latter has attracted much more attention in the scholarly literature. When looking back to the inflation of World War I, Keynes concluded: "No one benefited except the profiteer. The seeds of much subsequent trouble were sown. And we ended up with a national debt vastly greater in terms of money than was necessary and very ill distributed through the community" (Keynes 1940a, p. 73). The large debt payments required a high level of taxation to pay the "rentiers". Economic historians later added that the high interest rates necessary to attract investors also crowded out private sector investments to the detriment of employment (Foreman-Peck 2002, p. 108). The young Keynes had been rather unprepared for the possibility of financing a long war through inflation and massive borrowing. In 1914, as a 31-year-old, Keynes had argued that the war "would be short since governments would find it hard to appropriate the resources needed to support the war" (Maital 1972: 158[3]). "How to Pay for the War" was the result of having learned from historical experience and personal misjudgment.

Already by the early 1920s Keynes had developed a much more informed understanding of the relations between public debt, monetary policy, and exchange rates. The level of internal debt figured as the crucial variable defining the scope of monetary policy, and thus the exchange rate. In a lecture to the Institute of Bankers, Keynes said:

> *"You can always restore the currency to any value you like if you want to provided that it does not increase the claims of the bond-holders beyond what is tolerable. If it does, the Government is certain to be forced to inflate again, and the work will be undone" (Keynes 1922, p. 46).*

The lecture was what would become a typically Keynesian attack on the "inactive bond-holding rentier class" to whose earnings there had always been a limit set by what the "active earning part of the community" was willing to endure. In particular, it offered a defense of the principle that contracts referred to nominal rather than real monetary values. Some of Keynes' contemporaries had questioned the "justice" of such contracts once the value of money deteriorated. Keynes was not willing to buy this argument on the line that he thought it was "utterly impossible to compel the active part of the community to hand over an undue proportion to the bondholding class." (ibid., p. 47).

In his Tract on Monetary Reform, Keynes found "it would be too cynical to suppose that, in order to secure the advantages (of money depreciation, ST), governments (except, possibly, the Russian government) depreciate their currencies on purpose." (Keynes 1923, p. 53, also see: White et al. 2009). Yet if there was an intolerable level of debt, countries would either repudiate the debt, impose a capital levy, or inflate away the debt as Austria and Germany had done. Keynes' "great objection" to the third option was that it fell on small savings just as much as on big ones while possibly enriching "the ordinary entrepreneur capitalist". Since Keynes held the small savers to be too conservative to vote for a capital levy, and the entrepreneurs to be in favor of depreciation, he expected inflation to be the preferred choice of

[3] see: John Maynard Keynes, "War and the Financial System " and " The Prospects of Money," ECONOMIC JOURNAL (August and November 1914" (

dealing with high levels of debt - even though it was "unjust, inequitable, disastrous" (Keynes 1922, p. 49).

Keynes' proposal of "How to Pay for the War" had been driven by the unequal burden of national debt resulting from Word War I which contrary to his expectations had not been inflated away. It is little surprising that his solution of deferred pay introduced a specific link the management of the public debt. It was not that Keynes opposed borrowing by the state in favor of taxation. He thought the idea that war expenditures should be met "out of increased current effort and diminished current consumption" via taxation to be neither "just" nor "wise". Compassionately he wrote that it would make "all the difference in the world to each individual personally whether the excess of his income over his consumption is taken from him by tax or by loan". A loan would mean an addition to "his wealth, to his security, and to his comfort in facing the future", something which taxation would not provide. (Keynes 1939a, p. 45).

It is true that Keynes himself was much more concerned with the problem of wage adjustment than with debt devaluation. Mr. Barrow had in fact not called for inflation in order to expropriate labor but to lessen the debt burden. In his lengthy reply Keynes remained lofty in general terms and only touched briefly upon the specific issue of national debt. There was "much sentiment of this kind underground", Keynes acknowledged "too shy to lift its head for execution (…) And there is a flavour of naughtiness about it which some members of the Left find irresistible; there must be something good, they feel, in a proposal so repugnant to all respectable citizens". But while he admitted that "the reduction in the burden of the National Debt is a subsequent result of reducing the value of money" he did not see much value in it as it made "no significant contribution to the current financing of the war" (Keynes 1940c, p. 120-121). Thus, Keynes treated the proposal primarily as a danger to his non-inflationary scheme. His reply gives no clear hint as to whether Keynes might also have favored an inflationary reduction of debt *after* the war.

Interestingly, however, Keynes saw his plan rather as a burden to the Treasury, precisely because it tried to rule out inflation:

> *"A system of deferment of pay—and equally, a system of highly successful voluntary savings—will leave us with a larger national debt, measured in terms of real value, than if we adopt the method of imperfectly successful voluntary savings supplemented by inflation. For inflation is a mighty tax-gatherer. But the Treasury and the tax-payer of the future need only remain in doubt if they expect the price level reached by inflation*

to continue permanently. For the national debt under the inflationary system is likely to be larger in terms of money than under the system of compulsory savings; so that if prices subsequently fall back, the benefits of inflation will have proved illusory even to the Treasury" (Keynes 1940a, p. 68-69).

Thus, "How to Pay for the War" was less inflationary in terms of policy prescription than what the War Finance Group, including economists like Berry, Durbin, Gaitskell and Piercy had advocated in their meetings. These economists who took over administrative duties during the war, saw inflation as having the advantage of reducing the real debt, and they argued in favor of it. It should be noted, however, that Gaitskell and others always envisioned a "moderate and controlled inflation" that was restricted to a wartime economy, and that they were themselves enthusiastic of Keynes' non-inflationary ideas (Howson 1993, p. 75-76). This was also in line with Labour´s post-war full employment policy, the "central point" of which was "the maintenance of aggregate demand to prevent both inflation and deflation" (Howson 1993, p. 92). This highlights the contemporary view of seeing monetary fluctuations as largely resulting from private investment rather than monetary policy. Like Keynes, his economist colleagues were prepared to use controls against the immediate postwar inflation, and seemed utterly unprepared for continuous inflation beyond the envisioned post-war slump thereafter.

"How to Pay for the War" in Context: State Finance, Interest Rates and Inflation during and after WWII

After Keynes had published "How to Pay for the War" he became frustrated. The general impression he got was that the public seemed to not take the financial problem of the war seriously. In terms of public financing, his ideas of "How to Pay for the War" became half-heartedly implemented at best (Toye 1999). Meanwhile, however, the Treasury was involved in the practical necessities of public financing. In this context of thinking about the possibilities of managing interest rates, Keynes played a more crucial role (Skidelsky III, p. 26; cf. Moggridge 2002, p. 114). Sayers has credited Keynes for being a decisive factor in the patient interest policy of the Treasury. Keynes and other economists were not only decisive in explaining the advantages of low interest rates - of which the officials were readily aware (Allen 2019, 30). They were more generally important "in their illumination of the fundamental causes of war inflation" (Sayers 1956, p. 204).

Low interest rates became a predominant theme for financing the war for which Keynes made a number of practical suggestions. The high interest rates that the Treasury had had to pay during the First Word War clearly acted like a trauma. Pointing out how much the Treasury could save simply by borrowing at half a percentage point less was one of Keynes' first publicity stunts shortly after the war had begun. His "Sibylline books" principle put pressure on the public to invest in gilts as each new issue would have a longer maturity and was thus considered less attractive (Allen 2019, p. 48).

It seems safe to say that Keynes, despite his contempt for rentier incomes, did not envision an inflationary post-war era of "financial repression". Although he provided important advice in managing long-term interest rates, he never expected Treasury officials to be able to actually "cheat" the public over longer periods of time through a steady dosage of inflation. While Keynes war in favor of capital controls it is doubtful whether he would have appreciated them as an institutional backing for expropriating savers through inflation. Even more radical policy advisors like James Meade adhered to the principle of low inflation. Disagreeing with Keynes on the "proper rewards" of private savings, Meade stated:

> *"The more I examine the problem, the more certain it seems to me that the proper radical solution is to get interest rates down to or towards zero, thereby killing two birds with one stone: avoiding economic stagnation and removing the burden of debt interest on the budget. The only argument against this would be if it led to inflation; but within reason such a development could be counteracted by running a budgetary surplus" (Cabinet Office Diary, p. 46; cf. Howson 1993, p. 50).*

The years after the Second World War did not witness a continuing fall in interest rates but rather fluctuations. Howson argues that Dalton´s policy of lowering nominal interest rates was initially successful because of its unanticipated inflationary consequences, but this policy could not be sustained as expectations adapted (Howson 1993, p. 181). What remained in terms of experience from World War I was not the beneficial effects of inflation – much the contrary – but the need for extending controls beyond the immediate needs of the war time economy (Howson and Moggridge, p. 231).

The analysis thus supports the established view in English historiography that financial policy after the war should be seen as a continuation of "cheap money" and a policy out of necessity rather than a grand scheme of expropriating bond holders. As such it was discontinuous and highly context-dependent, rather than the beginning of a long era of "financial repression". It is no coincidence that the periodization is different and much more detailed in the studies of British postwar finance relative to studies on "financial repression". This echoes skeptical comments by Schnabel (2015) and Allen (2014 and 2019) on the validity of "financial repression" as a distinguishable "era". If neither real interest rates nor policy showed much stability between the 1940s and 1970s there is indeed reason to doubt such a periodization.

Conclusion

Should Keynes' writings during the Second World War, in particular his "How to Pay for the War" be seen as a policy guide for "financial repression"? A close reading of the sources provides little support for the current status of "How to Pay for the War" as a sort of founding document for an "era of financial repression". What can be confirmed is that "How to Pay for the War" highlighted the necessity of control and state intervention in order to cope with the financial burdens of the war economy. As such it was dealing with a particular situation (Trevithick 1975). Keynes' statements provide general insights with regards to important macroeconomic implications of shifts in supply and demand, but few general insights in terms of long-term policy recommendations. There is, however, a visibly dismissive attitude towards the "rentier" which by the 1940s had a long tradition, reflecting not only Keynes' attitude but the historical experiences of the English public since World War I. These attitudes clearly provide an important background to attempts of controlling the interest rates of public bonds.

With regards to the problem of inflation awareness, "money illusion", and the use of inflation as a policy tool "How to Pay for the War" provided no guidance. Keynes neither believed – in line with Leijinhufvud (1981) - in "money illusion", nor in inflation. To the contrary, the whole document was a warning against the use of inflation for financing requirements of the state. On the one hand, inflation is presented as distributively unjust, turning against small savers and putting more money than necessary in the hands of the "profiteers". On the other hand, it might have proven to be unreliable in a world in which the "old laws" of laissez-faire seemed no longer to be working. While the first reflected a lack of alternatives rather than public awareness, the second hinted at the evolutionary nature of inflation in a changing social context. Because of this neither inflation nor inflation awareness could be modelled in a general sense. This could explain why it has proved so hard to pin down Keynes' views on the concept of "money illusion" (Chytilova 2017).

While the analysis confirms the attempts by O'Connell (2016) and earlier writers (Moggridge and Howson 1974; Trevithick 1975; Leeson 1996) to rescue Keynes from charges of being an "inflationist" there is also an important and more general implication from this. Economists have treated the transition from "Keynesianism" to "Monetarism" as homo oeconomicus' liberation from the irrationality of "money illusion". This had far reaching implications for economic theorizing, for monetary and fiscal policy, as well as for labor market regulations. It also underpinned the transition to "financial liberalization" (McKinnon 1973). The interpretation is legitimate in so far as "Keynesian" economists like Duesenberry (1950) did indeed interpret Keynes' writings, the "General Theory" and "How to Pay for the War" in particular, as containing the assumption of stable "money illusion" (Trevithick 1975). Putting Keynes himself into perspective shows that little is gained by trying to bring "money illusion" back into economic modeling without paying attention to the complexity of changing social settings. This echoes Charles Kindleberger´s skepticism of interpreting inflation by adhering to technical economic theories at the expense of "the socio-economic matrix in which the economic events take place" (Kindleberger 1984, p. 31).

Finally, the analysis provides little support for the idea of an "era of financial repression" that has become an important label for periodizing the post-war world from a financial perspective. The low real interest rates during and immediately after the war were a direct effect of having learned about the difficult transition of moving from a war economy to a post-war-worlds, and in particular the burden that high public debt levels could place on the state. The high bank rates that had been imposed in England after the First World War in order to deal with inflationary pressures had proved disastrous. Keynes policy prescriptions were thus inherently anti-inflationary to avoid such problems in the first place. There is little to no evidence that Treasury or the Bank of England had an interest in inflation as a "mighty tax gatherer". This does not mean that there is no ground for distinguishing the period from the end of the Second World War to the mid-1970s. Yet "financial repression" might not be the most suitable label for doing so.

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